

Link State of Good Repair & Maintenance

Rider Experience & Operations Committee 03/02/2023



Why we are here

 To provide updates on upcoming State of Good Repair, maintenance, and Future Ready projects.

Informational briefing only.

State of Good Repair & Maintenance Project Details

Planned repair and maintenance projects

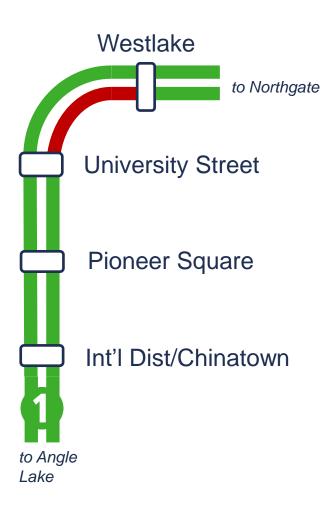
Work planned to begin in late Q2/ early Q3 2023

	Project type	Locations	Passenger benefits
1	Rail replacement	University Street-Westlake	Smoother and safer ride
2	Bond box replacement	IDS-Westlake	Fewer signal failures, better reliability
3	High voltage system assessment	IDS-Westlake	Safety, reliability
4	Royal Brougham grade crossing repair	IDS-Stadium	Safety, reliability, eliminates slow order when water present
5	Othello & Rainier Beach platform repair	Othello-Rainier Beach	Safer platform, reduces trip/fall hazard
6	Overhead wire replacement	Rainier Beach–Tukwila	Safety, reliability
7	System Expansion improvements	IDS-Northgate	Safety, reliability, service



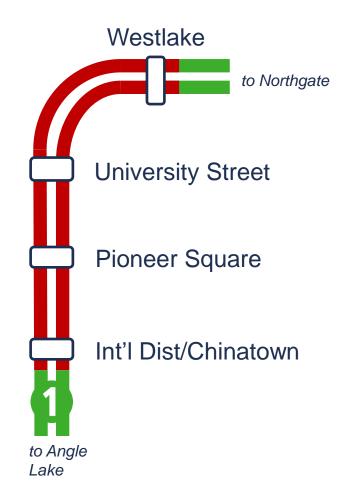
Rail replacement near Westlake

- This project will rebuild rail in the 90-degree curve northbound between University Street and Westlake (shown in red).
- Why this is necessary: Rail defects and accelerated wear are causing poor ride quality and jerking motions.
- Passenger benefit: faster and smoother travel through that curve.



Bond box replacement

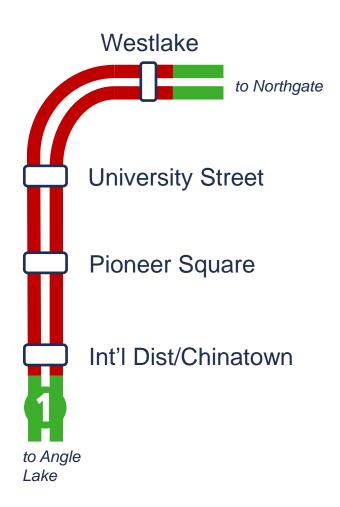
- This project replaces 60 embedded "bond boxes" that house signal connections to the tracks.
- Why this is necessary: Tunnel bus operations between 2007-2019 progressively damaged the boxes, leading to occasional signal failures and train delays.
- Passenger benefit: More reliable signaling system, fewer service disruptions.



High Voltage system assessment

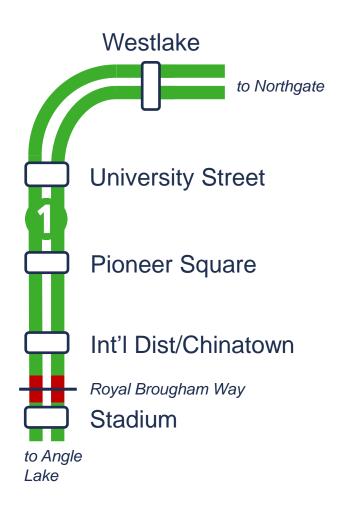


- Inspect and evaluate the High Voltage electrical system to confirm system integrity.
- Why this is necessary:
 Regular inspection and evaluation to ensure high-voltage system remains in good working order.
- Passenger benefit: Helps prevent future failures and service disruptions.

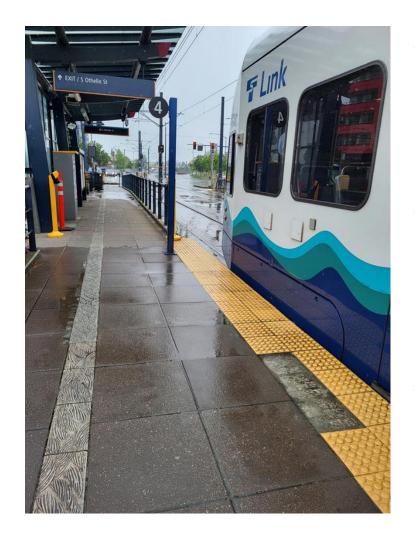


Royal Brougham grade crossing repair

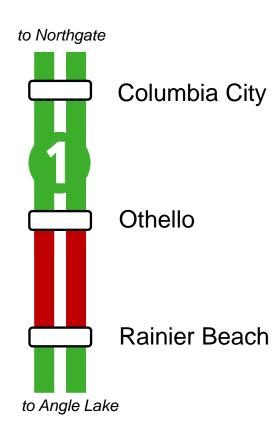
- This project repairs track grade to prevent standing water over the tracks during rainy period.
- Why this is necessary: During rainfall, water pools on the tracks, requiring trains to slow to 5 mph. Very heavy rains could disrupt service.
- Passenger benefit: Faster and more reliable service in wet weather conditions.



Othello and Rainier Beach platform repairs



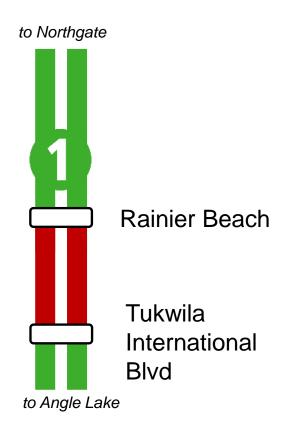
- Similar work was completed in Columbia City in 2022. New tiles will last longer and be easier to maintain.
- Why this is necessary: failing tiles and underlying concrete are a trip/fall hazard and are not ADAcompliant.
- Passenger benefit: renewed platforms that are safer and have a longer service life.



Overhead wire replacement

- Similar work was completed near Tukwila in 2022. Work will replace worn contact wire.
- Why this is necessary: the current contact wire, which delivers power to light rail vehicles, is worn and risks unplanned service failure.

 Passenger benefit: replaced contact wire will restore reliability and prevent risk of unplanned impacts.



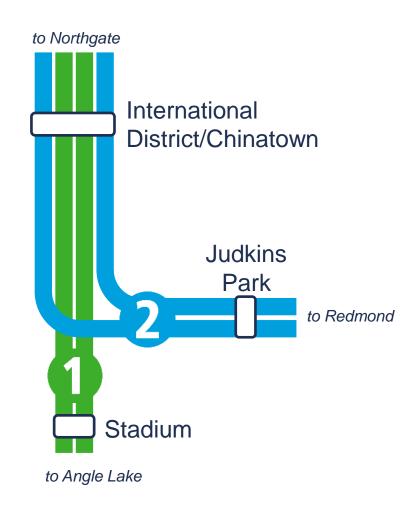
Additional projects currently in planning in year ahead

Q2 2023 to Q1 2024

- Northgate Station railing and electromagnetic cable improvements: project to improve safety on the Northgate platform and tunnel.
- Lynnwood Link prep work: completing overhead power work to connect the future 1 Line north extension.

Completing connection of 1 and 2 Lines

- Completing overhead power, plinth repair, activating rail switches, and other work to connect the future 2 Line to the current 1 Line.
- Prep work as early as late Q2/Q3 to minimize effects on service during full connection
- Full connection targeted for Q1 2024
- Completing connection will require major service disruption: Potential for multi-week single tracking



Next Steps

Improving passenger experience

- Developing Passenger Care Plans for each service disruption.
- Adding longer lead time before service disruptions to scale up mitigation and communication resources.
- Committing to have updated GTFS for accurate trip planning during major disruptions.
- Having staff volunteer as ambassadors.
- Providing key information in multiple languages.



Next Steps

- Continue to refine project level plans and minimize impacts of service disruptions for passengers
- Continue to look for efficiencies and opportunities to consolidate the work across the system
- Engage riders and stakeholders
- Regular REO updates with refined project details moving forward

Thank you.



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